Period: Date: Name:

**Outdoor Observation – The Setting Sun**

**Purpose:** In this activity, you will observe the **position** of the setting sun in order to conclude whether the sun sets in the same place, night after night, or not.

**Materials:** Paper (11X17), pencil

**\***DO NOT LOOK DIRECTLY AT THE SUN WITH YOUR NAKED EYE, EVER!

**Procedure:**

1. 20 minutes before sunset, estimate where the sun will set on the western horizon. Draw your western horizon on the 11X17 paper, using the entire length of the paper. Draw, to the best of your ability, prominent and permanent features such as buildings, trees, water towers, etc. DO NOT draw clouds, hot air balloons or other non permanent features you might see near or on your horizon.

2. As the sun sets, draw its position relative to the fixed features on your horizon. CAUTION: Never look directly as the sun; eye damage may result!!

3. Label the **date** and **time** of your observation on your drawing next to the setting sun you just observed and drew.

4. Return to the same spot 4-7 days later, just before sunset. Repeat the activity and record the results on your original drawing. Wait 4-7 more days and then do the activity one more time. **You should end up with ONE drawing that includes THREE observations. (i.e. one western horizon and three setting suns).**

**Questions:**

1. How did the sun’s position at sunset change over the course of your observation?

2. Based on your observations, predict where the sun might set in several weeks time. Sketch the sun using a dotted circle on your drawing relative to the fixed features on the horizon.